

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A semiconductor device comprising:
a shielding film and a gate signal line formed on an insulating surface;
a planarization insulating film formed so as to cover the shielding film and the gate signal line; and
a thin film transistor semiconductor layer having a channel formation region formed over the planarization insulating film,
wherein the shielding film overlaps the thin film transistor semiconductor layer with the planarization insulating film sandwiched therebetween.
2. (Previously Presented) A device according to claim 1, wherein thicknesses of the shielding film and the gate signal line are 0.1 μm to 0.5 μm .
3. (Previously Presented) A device according to claim 1, wherein the shielding film and the gate signal line are tapered.
4. (Original) A digital camera comprising a semiconductor device according to claim 1.
5. (Original) A video camera comprising a semiconductor device according to claim 1.
6. (Original) A goggle type display device comprising a semiconductor device according to claim 1.
7. (Original) An audio system comprising a semiconductor device according to claim 1.
8. (Original) A notebook personal computer comprising a semiconductor device according to claim 1.

9. (Original) A portable information terminal comprising a semiconductor device according to claim 1.

10. (Original) A DVD player comprising a semiconductor device according to claim 1.

11. (Previously Presented) A semiconductor device comprising:
a shielding film and a gate signal line formed on an insulating surface;
a planarization insulating film formed so as to cover the shielding film and the gate signal line; and
a thin film transistor including an active layer, the transistor being formed over the planarization insulating film,
wherein the active layer has a channel formation region, and
wherein the shielding film overlaps the channel formation region with the planarization insulating film sandwiched therebetween.

12. (Previously Presented) A device according to claim 11, wherein thicknesses of the shielding film and the gate signal line are 0.1 μm to 0.5 μm .

13. (Previously Presented) A device according to claim 11, wherein the shielding film and the gate signal line are tapered.

14. (Original) A digital camera comprising a semiconductor device according to claim 11.

15. (Original) A video camera comprising a semiconductor device according to claim 11.

16. (Original) A goggle type display device comprising a semiconductor device according to claim 11.

17. (Original) An audio system comprising a semiconductor device according to claim 11.

18. (Original) A notebook personal computer comprising a semiconductor device according to claim 11.

19. (Original) A portable information terminal comprising a semiconductor device according to claim 11.

20. (Original) A DVD player comprising a semiconductor device according to claim 11.

21. (Previously Presented) A semiconductor device comprising:
a lower layer capacitance wiring and a gate signal line formed on an insulating surface;
a planarization insulating film formed over the lower layer capacitance wiring and the gate signal line;
a capacitance wiring formed over the planarization insulating film; and
a pixel electrode electrically connected to the capacitance wiring,
wherein the lower layer capacitance wiring overlaps the capacitance wiring with the planarization insulating film sandwiched therebetween.

22. (Previously Presented) A device according to claim 21, wherein thicknesses of the lower layer capacitance wiring and the gate signal line are 0.1 μm to 0.5 μm .

23. (Previously Presented) A device according to claim 21, wherein the lower layer capacitance wiring and the gate signal line are tapered.

24. (Original) A device according to claim 21, wherein the thickness of the planarization insulating film is 0.5 μm to 1.5 μm .

25. (Original) A digital camera comprising a semiconductor device according to claim 21.

26. (Original) A video camera comprising a semiconductor device according to claim 21.

27. (Original) A goggle type display device comprising a semiconductor device according to claim 21.

28. (Original) An audio system comprising a semiconductor device according to claim 21.

29. (Original) A notebook personal computer comprising a semiconductor device according to claim 21.

30. (Original) A portable information terminal comprising a semiconductor device according to claim 21.

31. (Original) A DVD player comprising a semiconductor device according to claim 21.

32. (Previously Presented) A semiconductor device comprising:
a shielding film, a lower layer capacitance wiring and a lower layer wiring formed on an insulating surface;

a planarization insulating film formed over the shielding film, the lower layer capacitance wiring and the lower layer wiring;

a thin film transistor including an active layer, the thin film transistor being formed over the planarization insulating film; and

a capacitance wiring formed over the planarization insulating film,

wherein the active layer has a channel formation region,

wherein the shielding film overlaps the channel formation region with the planarization insulating film sandwiched therebetween,

wherein the lower layer capacitance wiring overlaps the capacitance wiring with the planarization insulating film sandwiched therebetween, and

wherein the thin film transistor has a gate electrode electrically connected to the lower layer wiring.

33. (Original) A device according to claim 32, wherein the shielding film, the lower layer capacitance wiring and the lower layer wiring each has a thickness of 0.1 μm to 0.5 μm .

34. (Previously Presented) A device according to claim 32, wherein the shielding film, the lower layer capacitance wiring and the lower layer wiring are tapered.

35. (Original) A device according to claim 32, wherein the thickness of the planarization insulating film is 0.5 μm to 1.5 μm .

36. (Original) A digital camera comprising a semiconductor device according to claim 32.

37. (Original) A video camera comprising a semiconductor device according to claim 32.

38. (Original) A goggle type display device comprising a semiconductor device according to claim 32.

39. (Original) An audio system comprising a semiconductor device according to claim 32.

40. (Original) A notebook personal computer comprising a semiconductor device according to claim 32.

41. (Original) A portable information terminal comprising a semiconductor device according to claim 32.

42. (Original) A DVD player comprising a semiconductor device according to claim 32.

43. (Currently Amended) A method of manufacturing a semiconductor device, comprising the steps of:

forming a shielding film and a gate signal line over an insulating surface;

forming an insulating film so as to cover the shielding film and the gate signal line;

polishing the insulating film to form a planarization insulating film; and

forming a thin film transistor semiconductor layer having a channel formation region over the planarization insulating film,

wherein the shielding film overlaps the thin film transistor semiconductor layer with the planarization insulating film sandwiched therebetween.

44. (Previously Presented) A method according to claim 43, wherein thicknesses of the shielding film and the gate signal line are 0.1 μm to 0.5 μm .

45. (Previously Presented) A method according to claim 43, wherein the shielding film and the gate signal line are tapered.

46. (Original) A method according to claim 43, wherein the thickness of the planarization insulating film is 0.5 μm to 1.5 μm .

47. (Previously Presented) A method of manufacturing a semiconductor device, comprising the steps of:

forming a shielding film and a gate signal line over an insulating surface;

forming an insulating film so as to cover the shielding film and the gate signal line;

polishing the insulating film to form a planarization insulating film; and

forming a thin film transistor including an active layer over the planarization insulating film,

wherein the active layer has a channel formation region, and

wherein the shielding film overlaps the channel formation region with the planarization insulating film sandwiched therebetween.

48. (Previously Presented) A method according to claim 47, wherein thicknesses of the shielding film and the gate signal line are $0.1\ \mu\text{m}$ to $0.5\ \mu\text{m}$.

49. (Previously Presented) A method according to claim 47, wherein the shielding film and the gate signal line are tapered.

50. (Original) A method according to claim 47, wherein the thickness of the planarization insulating film is $0.5\ \mu\text{m}$ to $1.5\ \mu\text{m}$.

51. (Previously Presented) A method of manufacturing a semiconductor device, comprising the steps of:

forming a lower layer capacitance wiring and a gate signal line over an insulating surface;
forming an insulating film over the lower layer capacitance wiring and the gate signal line;

polishing the insulating film to form a planarization insulating film;
forming a capacitance wiring over the planarization insulating film; and
forming a pixel electrode electrically connected to the capacitance wiring,
wherein the lower layer capacitance wiring overlaps the capacitance wiring with the planarization insulating film sandwiched therebetween.

52. (Previously Presented) A method according to claim 51, wherein thicknesses of the lower layer capacitance wiring and the gate signal line are $0.1\ \mu\text{m}$ to $0.5\ \mu\text{m}$.

53. (Previously Presented) A method according to claim 51, wherein the lower layer capacitance wiring and the gate signal line are tapered.

54. (Original) A method according to claim 51, wherein the thickness of the planarization insulating film is $0.5\ \mu\text{m}$ to $1.5\ \mu\text{m}$.

55. (Previously Presented) A method of manufacturing a semiconductor device, comprising the steps of:

forming a shielding film, a lower layer capacitance wiring and a lower layer wiring over an insulating surface;

forming an insulating film so as to cover the shielding film, the lower layer capacitance wiring and the lower layer wiring;

polishing the insulating film to form a planarization insulating film; and

forming a capacitance wiring and a thin film transistor that includes an active layer over the planarization insulating film,

wherein the active layer has a channel formation region,

wherein the shielding film overlaps the channel formation region with the planarization insulating film sandwiched therebetween,

wherein the lower layer capacitance wiring overlaps the capacitance wiring with the planarization insulating film sandwiched therebetween, and

wherein the thin film transistor has a gate electrode electrically connected to the lower layer wiring.

56. (Original) A method according to claim 55, wherein the shielding film, the lower layer capacitance wiring and the lower layer wiring each has a thickness of $0.1\ \mu\text{m}$ to $0.5\ \mu\text{m}$.

57. (Previously Presented) A method according to claim 55, wherein the shielding film, the lower layer capacitance wiring and the lower layer wiring are tapered.

58. (Original) A method according to claim 55, wherein the thickness of the planarization insulating film is $0.5\ \mu\text{m}$ to $1.5\ \mu\text{m}$.

59. (Previously Presented) The method of manufacturing a semiconductor device according to claim 43, wherein the semiconductor device is incorporated into an electronic appliance selected from the group consisting of a video camera, a digital camera, a projector, a head mounted display, a game equipment, a personal computer, a portable telephone, a navigation system, an electronic book, an audio system, a DVD player and a mobile computer.

60. (Previously Presented) The method of manufacturing a semiconductor device according to claim 47, wherein the semiconductor device is incorporated into an electronic appliance selected from the group consisting of a video camera, a digital camera, a projector, a head mounted display, a game equipment, a personal computer, a portable telephone, a navigation system, an electronic book, an audio system, a DVD player and a mobile computer.

61. (Previously Presented) The method of manufacturing a semiconductor device according to claim 51, wherein the semiconductor device is incorporated into an electronic appliance selected from the group consisting of a video camera, a digital camera, a projector, a head mounted display, a game equipment, a personal computer, a portable telephone, a navigation system, an electronic book, an audio system, a DVD player and a mobile computer.

62. (Previously Presented) The method of manufacturing a semiconductor device according to claim 55, wherein the semiconductor device is incorporated into an electronic appliance selected from the group consisting of a video camera, a digital camera, a projector, a head mounted display, a game equipment, a personal computer, a portable telephone, a navigation system, an electronic book, an audio system, a DVD player and a mobile computer.

63. (Previously Presented) The semiconductor device according to claim 1, wherein the planarization film is formed by polishing an insulating film by CMP.

64. (Previously Presented) The semiconductor device according to claim 11, wherein the planarization film is formed by polishing an insulating film by CMP.

65. (Previously Presented) The semiconductor device according to claim 21, wherein the planarization film is formed by polishing an insulating film by CMP.

66. (Previously Presented) The semiconductor device according to claim 32, wherein the planarization film is formed by polishing an insulating film by CMP.

67. (Previously Presented) The method of manufacturing a semiconductor device according to claim 43, wherein the insulating film is polished by CMP.

68. (Previously Presented) The method of manufacturing a semiconductor device according to claim 47, wherein the insulating film is polished by CMP.

69. (Previously Presented) The method of manufacturing a semiconductor device according to claim 51, wherein the insulating film is polished by CMP.

70. (Previously Presented) The method of manufacturing a semiconductor device according to claim 55, wherein the insulating film is polished by CMP.

71. (Previously Presented) The semiconductor device according to claim 1, wherein the insulating surface is a surface of a substrate.

72. (Previously Presented) The semiconductor device according to claim 11, wherein the insulating surface is a surface of a substrate.

73. (Previously Presented) The semiconductor device according to claim 21, wherein the insulating surface is a surface of a substrate.

74. (Previously Presented) The semiconductor device according to claim 32, wherein the insulating surface is a surface of a substrate.

75. (Previously Presented) The method of manufacturing a semiconductor device according to claim 43, wherein the insulating surface is a surface of a substrate.

76. (Previously Presented) The method of manufacturing a semiconductor device according to claim 47, wherein the insulating surface is a surface of a substrate.

77. (Previously Presented) The method of manufacturing a semiconductor device according to claim 51, wherein the insulating surface is a surface of a substrate.

78. (Previously Presented) The method of manufacturing a semiconductor device according to claim 55, wherein the insulating surface is a surface of a substrate.